

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently Amended) A mobile cellular telecommunications network employing macro-diversity, ~~the network comprising:~~

~~a mobile station, wherein the~~ wherein a mobile station can establish a plurality of simultaneous radio links with a plurality of digital cells in the network, said network comprising:

~~a plurality of digital cells, wherein the~~ means for dividing the plurality of digital cells of the network are divided into a plurality of groups, and said plurality of groups including:

a first group of geographically related digital cells, wherein the mobile station has an established radio link with at least one digital cell in the first group; and

a second group of geographically related digital cells, wherein the mobile station does not have an established radio link with any of the digital cells in the second group;

means for establishing additional radio links between the mobile station and other digital cells in the first group upon meeting a first link quality threshold; and

means for establishing a radio link between the mobile station and a digital cell in the second group only upon meeting a second link quality threshold that is higher than the first link quality threshold;

wherein, when the mobile station establishes macro-diversity radio links within a first geographical area related to the first group of digital cells, the mobile station is more likely to establish additional radio links only with digital cells in the first geographical area.

~~wherein, when determining whether to establish a new radio link between a mobile station and a new digital cell, the network applies a quality criterion to the new~~

~~link, which depends on whether the new digital cell belongs to any group of the plurality of groups with which the mobile station does not already have a link.~~

2. (Canceled)

3. (Currently Amended) [[A]] The mobile cellular telecommunications network as claimed in claim 1, wherein the quality ~~criterion~~ threshold relates to a required signal quality level.

4. (Currently Amended) [[A]] The mobile cellular telecommunications network as claimed in claim 1, wherein the quality ~~criterion~~ threshold relates to a longer time period for which a required signal quality level is satisfied.

5. (Currently Amended) [[A]] The mobile cellular telecommunications network as claimed in claim 1, wherein a plurality of layers of groups ~~can be~~ are defined, such that each digital cell ~~may be~~ is in one group within each layer.

6. (Currently Amended) [[A]] The mobile cellular telecommunications network as claimed in claim 5, wherein digital cells associated with one base station are considered to be in the same group.

7-10. (Canceled)

11. (Currently Amended) [[A]] The mobile cellular telecommunications network as claimed in claim 1, ~~which uses~~ wherein the network is a Code Division Multiple Access network.

12. (Canceled)

13. (Canceled)

14. (Currently Amended) [[A]] The method as claimed in ~~claim 12~~ claim 28, wherein the quality ~~criterion~~ threshold relates to a required signal quality level.

15. (Currently Amended) [[A]] The method as claimed in ~~claim 12~~ claim 28, wherein the quality ~~criterion~~ threshold relates to a longer time period for which a required signal quality level is satisfied.

16. (Currently Amended) [[A]] The method as claimed in ~~claim 12~~ claim 28, wherein a plurality of layers of groups can be defined, such that each digital cell may be in one group within each layer.

17. (Currently Amended) [[A]] The method as claimed in claim 16, wherein digital cells associated with one base station are considered to be in the same group.

18-21. (Canceled)

22. (Currently Amended) [[A]] The method as claimed in ~~claim 12~~ claim 28, wherein the network ~~uses~~ is a Code Division Multiple Access network.

23-26. (Canceled).

27. (New) A mobile cellular telecommunications network employing macro-diversity, wherein a mobile station can establish a plurality of simultaneous radio links with a plurality of digital cells in the network, said network comprising:

means for dividing the plurality of digital cells of the network into a plurality of groups, said plurality of groups including:

a first group of digital cells controlled by a first radio network controller, wherein the mobile station has an established radio link with at least one digital cell in the first group; and

a second group of digital cells controlled by a second radio network controller, wherein the mobile station does not have an established radio link with any of the digital cells in the second group;

means for establishing additional radio links between the mobile station and other digital cells in the first group upon meeting a first link quality threshold; and

means for establishing a radio link between the mobile station and a digital cell in the second group only upon meeting a second link quality threshold that is higher than the first link quality threshold;

wherein, when the mobile station establishes macro-diversity radio links, the mobile station is more likely to establish additional radio links with digital cells controlled by the first radio network controller.

28. (New) A method of establishing macro-diversity radio links in a mobile cellular telecommunications network, wherein a mobile station can establish a plurality of simultaneous radio links with a plurality of digital cells in the network, said method comprising:

dividing the plurality of digital cells of the network into a plurality of groups, said plurality of groups including:

a first group of geographically related digital cells, wherein the mobile station has an established radio link with at least one digital cell in the first group; and

a second group of geographically related digital cells, wherein the mobile station does not have an established radio link with any of the digital cells in the second group;

establishing additional radio links between the mobile station and other digital cells in the first group upon meeting a first link quality threshold; and

establishing a radio link between the mobile station and a digital cell in the second group only upon meeting a second link quality threshold that is higher than the first link quality threshold;

wherein, when the mobile station establishes macro-diversity radio links within a first geographical area related to the first group of digital cells, the mobile station is more

likely to establish additional radio links only with digital cells in the first geographical area.

29. (New) A method of establishing macro-diversity radio links in a mobile cellular telecommunications network, wherein a mobile station can establish a plurality of simultaneous radio links with a plurality of digital cells in the network, said method comprising:

dividing the plurality of digital cells of the network into a plurality of groups, said plurality of groups including:

a first group of digital cells controlled by a first radio network controller, wherein the mobile station has an established radio link with at least one digital cell in the first group; and

a second group of digital cells controlled by a second radio network controller, wherein the mobile station does not have an established radio link with any of the digital cells in the second group;

establishing additional radio links between the mobile station and other digital cells in the first group upon meeting a first link quality threshold; and

establishing a radio link between the mobile station and a digital cell in the second group only upon meeting a second link quality threshold that is higher than the first link quality threshold;

wherein, when the mobile station establishes macro-diversity radio links, the mobile station is more likely to establish additional radio links with digital cells controlled by the first radio network controller.